Hollywood Orchestral Woodwinds Virtual Instrument

Silver Edition

Users' Manual

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Welcome

About Hollywood Orchestral Woodwinds

This extensive library is the third installment of the very popular "Hollywood" series from EastWest. Like the two libraries that preceded it to market, it was recorded, engineered, and produced with the superior level of quality for which the EastWest brand is known. And like its predecessors, it was recorded in Studio 1 at EastWest Studios, giving all three libraries consistent sound and ambience.

Hollywood Orchestral Woodwinds was designed from the start to be the most detailed collection of orchestral woodwind instruments ever assembled. And the finished library lives up to the aspiration of its original design.

Like the two earlier releases in the EastWest Hollywood series, this library was sound engineered by Academy Award, C.A.S. (Cinema Audio Society), BAFTA, and Emmy award-winning sound engineer Shawn Murphy. He has recorded and mixed the scores for more than 300 feature films including Indiana Jones and the Kingdom of the Crystal Skull; Star Wars: Episode II - Attack of the Clones; Star Wars: Episode III - Revenge of the Sith; Star Wars: A Musical Journey; Jurassic Park; Jurassic Park The Lost World; Harry Potter and the Prisoner of Azkaban; Titanic; Minority Report; The Bourne Ultimatum; Saving Private Ryan; Munich; The Passion Of The Christ; X-Men: The Last Stand; Ice Age; and many, many others.

Studio 1 at EastWest Studios, during setup for a recording sessions

How to Use This and the Other Manuals

All documentation for the EastWest PLAY Advanced Sample System and its libraries is provided as a collection of Adobe Acrobat files, also called PDFs. They can be viewed on the computer screen or printed to paper.

Each time you install one of the PLAY System libraries, two manuals are copied to the file system on your computer:

- **The manual that describes the whole PLAY System.** This, the largest of the manuals, addresses how to install and use all aspects of the software that are common to all libraries.
- **The library-specific manual**, such as the one you are currently reading. This smaller document describes aspects that differ from one library to the next, such as the list of included instruments and articulations.

Using the Adobe Acrobat Features

By opening the Bookmarks pane along the left edge of the Adobe Acrobat Reader, the user can jump directly to a topic from the section names. Note that some older versions of Acrobat Reader might not support all these features. The latest Acrobat Reader can be downloaded and installed at no cost from the Adobe web site. (As an example of a hyperlink, you can click on the last words of the previous sentence ("Adobe web site") to be taken directly to the Adobe site.)

When reading this and other manuals on the computer screen, you can zoom in to see more detail in the images or zoom out to see more of the page at once. If an included picture of the user interface, or a diagram, seems fuzzy or illegible, then zoom in using one of several means provided in the Acrobat Reader software. Note that images are clearest and screen shots most legible at 200% and next best at 100%.

The Master Navigation Document

Because the EastWest PLAY System is a collection of components, each with its own User's Manual, a Master Navigation Document (MND) is provided to allow users to jump quickly between these PDFs when being read on the computer screen. This MND is a one-page file with hyperlinks to the PLAY System documentation and to all the library manuals. Hyperlinks to this Master Navigation Document are found on the title page of each chapter in each document. From there, you can open any other document in the collection.

As one example, if you're reading some chapter in this documentation for the Hollywood Orchestral Woodwinds library, and need to open the manual for the PLAY System as well, go to any chapter title page and click on the link that says, "Click on this text to open the Master Navigation Document." It will open in a new window on the screen. In that document, click on the icon for the PLAY System and its manual will open in the same window, hiding the MND. You now have both the Hollywood Orchestral Woodwinds

library manual and the PLAY System manual open in separate windows so you can refer to them both.

Separate Diamond, Gold, and Silver Manuals

The Hollywood Orchestral Woodwinds virtual instrument is available in three separate versions: Diamond, Gold, and Silver. And each has a manual slightly different from the other, so it is important that you use the correct version of the manual. This is the manual for the Silver Edition. If you have the incorrect version of the manual, contact Technical Support at EastWest.

Important Note for Users of the Silver Edition

Some of the description of this virtual instrument refers to the full products available as the Gold and Diamond Editions. The Silver Edition is designed as a smaller library for those who want or require a product that uses fewer computer resources. To that end, it contains a small subset of the most useful articulations from the larger editions. Some references to the size of the library are included here, and they give readers a sense of the scope of the full Gold or Diamond Edition.

Online Documentation and Other Resources

For the most up to date information, visit the support pages at EastWest's web site. There you can find:

- information made available after these manuals were written
- FAQ pages that may already list answers to questions you have
- suggestions from EastWest and other users of the EastWest PLAY System
- news about upcoming releases

The address is:

http://support.soundsonline.com

You can also visit the EastWest online forums. There you can read comments and questions from others who use EastWest products and post your own. The many forum participants are a good source of helpful information about both the technical and musical aspects of this software.

The address of the forums is:

http://www.soundsonline-forums.com

If you visit the forums to receive support from EastWest (instead of going directly to the support site listed above), make sure you post your support request in the Support forum and not in the General Discussion forum.

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Hollywood Orchestral Woodwinds, An Overview

The Woodwind Section for the Hollywood Series

This EastWest virtual instrument contains a selection of woodwinds heard in both traditional and modern orchestras. The included instruments fall into three families:

- Flutes
- Clarinets
- Double Reeds

The Silver Edition contains the 8 most common members of these families. The Gold and Diamond Editions include an additional 5 less common members, such as the Eb Clarinet and the Bass Flute, in order to provide unique timbres and/or to extend the range of a family. See the tables starting on page 19 for more detail on the individual instruments included in the Silver Edition. The SoundsOnline web site includes the full list, if you're interested.

Each instrument has been sampled in a solo performance. Of course, you can use multiple instances of any articulation file to create polyphonic writing or parallel lines.

The instruments were recorded in a wide variety of articulations, from staccatissimo to sustained notes to several kinds of realistic legato with sampled slurs between notes.

These instruments can be used on their own or they can be integrated into a larger orchestral framework with other members of the EastWest Hollywood series: Hollywood Strings and Hollywood Brass (and once it's released, Hollywood Orchestral Percussion). All these members of the EastWest Hollywood series have been designed to work together to create an integrated orchestral sound:

- They were all recorded in the same studio.
- They were all recorded with the same microphones in the same positions within the recording space.
- They were all engineered by Sound Engineer Shawn Murphy.
- They were all programmed using the same practices and software.

So, even though they are sold as separate products and were released over the course of a few years, they form a single platform for orchestration and music realization.

Comparison of the Diamond, Gold, and Silver Editions

The Gold Edition is mostly a subset of the Diamond Edition. It is intended for those with smaller or less capable computer systems, and for those looking for most of the features and power of the Diamond Edition but at a smaller price. Here are the differences:

- **Bit Depth:** the samples in the Diamond Edition are 24-bit; those in the Gold Edition are 16-bit.
- **Delivery:** the Diamond Edition is provided on a hard drive; the Gold Edition is provided on a set of DVDs; the Silver Edition is available to download online.
- **Mic Positions:** The Diamond Edition includes samples from 5 independent mic positions that can be mixed together to achieve control over both acoustic vantage and spaciousness of the sound; the Gold Edition provides a single mic position.

The list of articulations for the Diamond and Gold libraries are the same. The Silver Edition has all the attributes of the Gold Edition above, but it has a much smaller list of articulations.

Those with a Silver Edition license can upgrade to the Gold or Diamond Edition license (and receive the extra content) by contacting EastWest. Details about upgrading are also available on the SoundsOnline.com website.

What's Included

This Hollywood Orchestral Woodwinds library (Silver Edition) you purchased includes all the following:

- a complete set of sample-based instruments, enumerated later in this manual
- approximately 13 Gigabytes of 16-bit, 44.1 kHz samples
- the EastWest PLAY Advanced Sample Engine
- the unique authorization code that identifies the license you bought
- manuals in Adobe Acrobat (.PDF) format for both the EastWest PLAY System and the Hollywood Orchestral Woodwinds Virtual Instrument
- an installation program to set up the library, software, and documentation on your computer
- an Authorization Wizard for registering your license in an online database

One required item *not* usually included is an iLok security key. If you already have one from an earlier purchase of software, you can use it. Otherwise, you need to acquire one. They are available from many retailers that sell EastWest and Quantum Leap products, or you can buy one online at www.soundsonline.com.

Hardware Requirements

See the PLAY System manual for a complete list of the Hardware and Software Requirements for installing and running any PLAY System library.

The Gold and Silver Editions include the following suggestion:

"Because both the size and complexity of many of the Hollywood Orchestral Woodwinds instruments are greater than in other PLAY libraries, you will likely need an even more capable system than is recommended for those other libraries:

- Intel or AMD quad-core processor, or higher, running at a minimum of 2.66 GHz
- 8 GB of RAM or more
- a 64-bit operating system; and a 64-bit host when running PLAY as a plug-in

Note that this is a recommended system, and is more powerful than the minimum of what is required."

If you're thinking of upgrading at some point to one of the larger editions, you'll need to keep that recommendation in mind. But when using the Silver Edition you can probably follow the recommendations for a minimal system provided in the main PLAY System manual.

Requirements for Sample Storage

The required space on the hard drive for an installation of Hollywood Orchestral Woodwinds (Silver Edition) is approximately 13 GB (Gigabytes).

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The Orchestral Woodwinds User Interface

Each PLAY library presents its own interface when one of its instruments is the current one, as specified in the Instruments drop-down in the upper right corner. The image at the bottom of the page provides an overview of the entire window in Player View when the current instrument is from the Hollywood Orchestral Woodwinds library.

Much of this interface is shared by all PLAY System libraries, and the common features are described in the PLAY System manual. The controls specific to Hollywood Orchestral Woodwinds described later in this section are those listed on the next page. If you don't see a control described in this chapter, look at the PLAY System manual; that's the other manual installed on your hard drive during program setup.

Here are the controls described in this manual (and not in the PLAY System manual):

- Performance (4 buttons)
- Round Robin Reset
- Stereo Double
- the graphical representation of the Envelope

Performance

There are five buttons grouped together in the Performance section. They include three buttons for turning on and off scripts specific to Hollywood Orchestral Woodwinds that can control performance parameters:

- Portamento Sim
- Repetition Sim
- Legato Sim

"Sim" is short for Simulation; that is, these buttons control scripts that help to *simulate* the named feature.

A fourth button turns on or off the restriction that a legato instrument should interpret all notes as monophonic (even when the notes overlap in time):

- Monophonic True Legato

The fifth button in the group, Round Robin Reset, is described in its own section below.

See the section on Performance Scripts, starting on page 14, for information on how to use the three scripts that have user-modifiable parameters: Portamento, Legato, and Repetition. You can also read there about using MIDI control codes to turn these scripts on and off.

When you first open an articulation, there are default settings (On or Off) for each of these three scripts, as chosen by the EastWest sound designers. If you want a different set of defaults, you will need to save the .ewi file that way and load your new version when you need it.

Legato Sim Button

Legato is the style of playing notes in a phrase with no significant silence between them in order to produce a smooth and flowing melodic line. Use this button to turn on a legato effect for the articulation. This script-based effect is separate from the actual Legato instruments included in Hollywood Orchestral Woodwinds.

Portamento Sim Button

Portamento, also sometimes called glissando, is the technique of a continuous slide in pitch from one note to the next note in the phrase. Portamento, as available with this script, is usually a short, anticipatory movement between the pitches of two adjacent notes.

Turning on the Portamento script in a phrase is a subtle way to increase a sense of realistic playing.

Repetition Sim Button

Repetition, in this context, refers to the playing of a single pitch more than once with no different notes played between them in the same phrase. Turning on this button causes repeating notes to sound slightly different, avoiding the sense of mechanical repetition. See a more complete description of the repetition script, starting on page 16, for more on how to use this feature.

Monophonic True Legato Button

Turning on this button causes a legato instrument to become monophonic. That is, if one note is still playing when another note starts, the first note will be terminated, even though the MIDI note has not yet reached the Note Off event. If you choose to turn off this behavior so that you can have more than one melodic line at once in a single instance of a legato patch, you run the risk of PLAY making inappropriate slurs from one melodic line to the other.

Round Robin Reset Button

A round robin articulation is one in which several different samples are recorded with all parameters, such as volume, speed of attack, and so on, being essentially constant. The PLAY Engine then knows to alternate between the two or more samples during playback. The goal is to avoid what's often called the "machine gun effect," in which playing the same sampled note repeatedly causes the unnatural sound of consecutive notes being mechanically identical.

Any articulation with "RR" in its name uses round robin technology. Those with an "x3," "x4," or the like in the name, use 3, 4, or more different samples for each note

There's one potential problem with round robin technology, and one way to solve it is the Round Robin Reset button. The PLAY Engine remembers which sample should be played the next time the note sounds. If, for example, a round-robin patch contains two samples, A and B, and a piece uses that note 7 times, the PLAY Engine plays A B A B A B A. If the piece is played again from the beginning, the engine will play starting with B, because that's next in order. The second rendition will be subtly different. Being able to reset all round-robin articulations to the beginning of the cycle allows for consistent playback.

You can use this button to reset all round robin articulations on demand. Or use your choice of a MIDI note or MIDI control code to reset them one instrument at a time from a MIDI keyboard or the data stored in a sequencer project. See the description of the Settings dialog (in the main PLAY System manual) for more information about this articulation-specific approach.

Stereo Double Controls

This knob, with its three buttons, gives the user the option of using exclusively the left stereo signal or right when "Stereo" is selected from the Channel Source drop-down. For any other setting, this control has no effect.

The knob lets the user determine the spread of the signals, how far apart the ear perceives the stereo channels to be. A value of 0% brings the two channels together at the center (unless the Pan knob positions the output differently), and is the equivalent of turning off the controls with the button below the knob. A value of 100% calls for the maximum spread available. Select between the left and right signal with the L and R buttons, respectively.

The Master Button and Pre-Delay Knob in the Reverb Controls

The common features of the Reverb Controls are explained in the main PLAY System manual, but the Hollywood Orchestral Woodwinds user interface includes two features not in all PLAY libraries:

The Master Button

When this button is pressed and the On light is illuminated, the Reverb for this instrument applies to all the other instruments in this instance of PLAY, including instruments from libraries that do not include a Master button.

If the Master button is already engaged in another instrument in the current instance of PLAY, and the Master button is pressed in a new instrument, then the settings in the UI of the new instrument become the settings for all instruments in this PLAY instance.

The processing of high-quality reverb can be very CPU-intensive and it is often the case that you want to use the same reverb on all the instruments in an audio track. Engaging the Master Reverb button allows you to run a single instance of the reverb processor and have the effect apply to multiple instruments.

Reverb Master On will make all other instruments share this reverb and its settings. This is designed to conserve DSP resources by using one reverb for all instruments.
OK

When you engage the Master button, PLAY puts up a warning message, as shown above, to remind you that the reverb settings in this instrument will now apply to all instruments in this instance.

The Pre-Delay Knob

Increasing this number delays the onset of the reverb so that the initial section of the sample is unaffected. This feature allows the sound of each attack to maintain its true color while the rest of the note still gains the benefit of the reverb effect.

The Graphical Representation of the Envelope

The Envelope Controls are described in the main PLAY System manual because they are common to all PLAY System libraries. Only some libraries include the graph, as shown here, so it is included in the manuals for those libraries only.

Note that the total width of the graph represents the total length of all phases of the envelope. Therefore, when you change something in one part of the graph, for example, the length of the decay, you may see the slopes of other components, the attack and the release, change as well because those phases become a larger or smaller percent of the whole; this is as expected.

The Browser View

The Browser behaves identically among all PLAY System libraries. Read the main PLAY System manual for information about how to use that view.

Performance Scripts

The Hollywood Orchestral Woodwinds Virtual Instrument includes three user-modifiable, built-in scripts that can provide extra realism to phrases that take advantage of their benefits:

- The Portamento script provides a sliding pitch between consecutive notes in a phrase. This can be used to emulate the subtle portamento that occurs, for example, when a string player's finger moves along the string at the beginning or end of a sounding note.

- The Repetition script changes the quality of the notes when a single pitch is played multiple times in quick succession. Although similar to what can be achieved with Round Robin patches, the effect can be used on any articulation, not only those with "RR" in the name.

- The Legato script creates a more flowing and connected sound for notes in a continuous phrase.

The scripts themselves are not modifiable by the user, but important parameters can be adjusted using MIDI control codes. See details of how to use the control codes in the descriptions that follow.

In order for a script to actively affect the notes in an articulation file, the script must be activated in the PLAY user interface. The image above shows the Legato script turned off and two other scripts turned on. In addition, the appropriate MIDI Control Code must not be turned Off; that means if MIDI values are being generated for the On/Off code

on this channel, as in the table below, they must currently be in the range 64 to 127; if MIDI CC values are not being generated, the Control Code is considered On (as long as the light in the user interface is On).

The effect of engaging the Portamento or Legato effect is subtle. The goal is the sound of smooth, connected playing and not anything so pronounced that it will draw attention to the effect itself. These two scripts share many features in the ways they affect the sound; that is, the Legato script includes a small portamento component and vice versa.

MIDI Control Codes

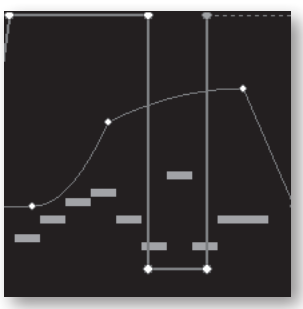
These MIDI values can be controlled in standalone mode by adjusting the controls (knobs or sliders) on a "control surface" or MIDI keyboard. When run as a plug-in inside a sequencer or other host, you can create a controller envelope to automatically adjust values during playback. See the documentation from your hardware or software for information about how to change the values of control codes.

The following table lists the codes that affect these scripts.

Code	Portamento	Repetition	Legato
5	Time		Time
65	On/Off		
68			On/Off
69		On/Off	

The three On/Off control codes all work the same way: a value 64 or higher turns the script on and any other value (0–63) turns the script off.

CC 5 affects the duration of the portamento or legato. The possible values are 0–127. The higher the value the longer the effect takes to complete; that is, you should set higher values to make the sound more pronounced. Use your ear to find the right values for each note in the phrase.



The image at the left shows two envelopes affecting the Portamento script in a host. The nine white horizontal bars are the notes. The light-gray line that jumps from the top to near the bottom and back to the top is CC 65 that turns the script on and off so that only some notes use portamento. The curving line near the middle is CC 5, setting the effect's "Portamento time" parameter for each note individually. (Note that the middle section, when the CC 65 line is near the bottom, CC 5 actually has no effect because the script is turned off at that point.)

Monophonic Behavior

Both the Portamento and Legato scripts change the instrument so that it can play only one note at a time whenever the script is turned on. If a note is still playing when a new

note starts, the first note will end at that moment. This behavior allows for no ambiguity in how the notes form a phrase.

One consequence of this behavior is that if you want two concurrent legato lines—or one legato and one non-legato line—played with the same articulation, you need to open the same articulation file more than once and turn on the Legato script where appropriate. Of course, the same rule holds for the Portamento script.

Repetition Script

When playing consecutive notes of the same pitch, the use of a single sample over and over in quick succession can sound mechanically identical, which is called the "machine gun effect." The Round Robin patches are one way to fix this problem. The Repetition script solves the same problem in another way. For any articulation, this script uses one or more of three randomly selected options to keep the sound a little different on each repetition:

- Use the sample for a nearby note (for example, a half step higher or lower) and retune it to the needed pitch.
- Start the note a tiny amount before or after the specified start time.
- Detune the sample a few cents (hundredths of a semitone) higher or lower.

This variability gives the sound a more human, less robotic, feel. After all, what human instrumentalist plays every note exactly on pitch and at exactly the notated time?

The producers have selected which of these three approaches will be used for each articulation file—and how much variability to allow—to achieve the most realistic behavior. That is, some patches randomly use all three approaches, while others may use only one or two of them.

Note that Repetition scripts do not have the equivalent of the Round Robin Reset button to ensure an identical sound every time the same track is bounced to audio. The randomness of the results is a feature. You need to decide how important exact repeatability is when selecting either a round robin patch or the Repetition script.

The Articulations Control and Keyswitches

In the center of the Player view is a control that lists the articulations available in the current window. Often this list is short, containing only the one articulation given in the instrument name, and perhaps its release trails on a separate line. The image at the right shows the control for a Legato Slur instrument.

The checkboxes at the left of the control allow you to deactivate any articulation (turn it off while leaving its samples in memory) or, separately, to unload the samples from memory. The small knobs in the third column allow you to adjust the loudness of each articulation without affecting the loudness of the others.

4. Instruments, Articulations, and Keyswitches

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Instruments, Articulations, and Keyswitches

The Hollywood Orchestral Woodwinds virtual instrument is a library designed to create orchestrations of the kind heard in movie soundtracks—but, of course, it can be used for many other types of music, as well. And it mixes well with other virtual instruments from EastWest, so feel free to add in strings, guitars, percussion, voices, whatever you can imagine. This library and all other libraries in the same EastWest "Hollywood" series are designed to work together particularly well; they include the same variety of microphone positions and other features that help them blend into a unified sound.

For the purpose of the tables in this chapter, the library can be grouped into three sets of instruments based on how the sound is generated:

- Flutes (no reed)
  - › Flute
  - › Piccolo Flute
- Clarinets (single reed)
  - › Clarinet
  - › Bass Clarinet
- Double reeds
  - › Oboe
  - › English Horn
  - › Bassoon
  - › Contrabassoon

The various articulations of these 8 instruments are enumerated in the tables that follow. You might want to print out the pages containing these tables as a reference.

For those considering upgrading to the Gold or Diamond Edition, here's a list of the instruments included in those larger versions, but not in Silver. (In addition, Gold and Diamond Editions include many more articulations for the 8 instruments listed above.)

- Flutes (no reed)
  - › Flute 2
  - › Alto Flute
  - › Bass Flute
- Clarinets (single reed)
  - › E♭ Clarinet
  - › Contrabass Clarinet
- Double reeds
  - › (no additional instruments)

The characteristics of these orchestral instruments are not described in this manual because they are members of standard instrumental families. A few, such as the Bass Flute and Contrabass Clarinet, are uncommon, though their usage can be easily extrapolated from the more common members of the family.

The one instrument that needs some explanation is the one called "Flute 2." It is a standard transverse flute, just like "Flute," but it was played by a different flautist who sat in a slightly different position on stage. In other words, no samples are shared between "Flute" and "Flute 2," so if played together in unison, they will not collapse into a single performance.

The Tables of the Instruments

The sounds of each instrument are provided in the form of one or more instrument files (with extension .ewi in the Browser view), often representing separate articulations. Within some instrument files may be several articulations that can be selected in one of several ways:

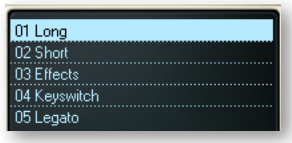
- through the on-screen UI
- with keyswitch notes (Gold and Diamond only)
- by moving the Mod Wheel

The Categories of Articulations

For all instruments in this library, the list of instruments is divided into categories. In the Browser, they appear as separate folders:

- 01 Long
- 02 Short
- 03 Effects
- 04 Keyswitch
- 05 Legato

(The number at the start of each category name is there to make sure this list always appears in this order within the Browser.) These categories appear as section headers within the following table to help you find instrument files in the tables and in the Browser.



Note that not every instrument has articulations files in every folder. It is especially for the less common instruments where you may find missing folders.

A Note on Dynamics in Hollywood Orchestral Woodwinds Instruments

As discussed in multiple places within EastWest manuals, there are several ways you can affect with MIDI parameters how loudly an instrument should play:

- MIDI Velocity
- the Mod Wheel, CC 1
- Volume, CC 7
- Expression, CC 11

Volume works on any and all instruments. Volume should be used to set a loudness level relative to other instruments. And Expression should be used to shape the continually changing dynamics, timbre, and expressiveness of each instrument. Neither Volume nor Expression change the timbre of the instruments, only the loudness.

Hollywood Orchestral Woodwinds instruments use either MIDI Velocity or the Mod Wheel—or occasionally both—to affect the sound of the instruments when they are played louder or softer. As a general rule, in this library:

- Staccato and Marcato: use Velocity
- Sus Accent: uses both Velocity and the Mod Wheel to affect different parts of the sound
- the rest: use the Mod Wheel

For more detail, see the description of specific instruments later in this chapter.

Many Hollywood Orchestral Woodwinds instruments rely on the Mod Wheel to cross-fade between samples instead of selecting which sample to play based on the MIDI Velocity parameter of each note. This approach gives the composer much more in the way of continuous control over both the loudness and the timbre. But this control comes with a price: greater use of the computer's resources, especially the RAM and the processors. As is mentioned in some of the instrument descriptions below, PLAY might be playing up to 6 concurrent samples for each note (not including release trails).

Use the guidelines elsewhere in this section to learn whether to use Velocity, the Mod Wheel, or both, but if you find that an instrument is not responding to one of the ways of specifying loudness, investigate using other means to get the dynamics you're looking for.

Overview of the Instruments in Hollywood Orchestral Woodwinds

The following tables, which extend over several pages, list the instrument files available for each instrument. A check mark in a cell indicates that an .ewi file as named at the left of the row is available for the solo instrument named at the top of the column.

These tables do not explore the articulations available within each instrument file; that level of detail is provided later in this chapter.

The page numbers in the last column are hyperlinks to descriptions and features available for that instrument file; click on any number (when the manual is viewed on a screen) to jump to that page.

Tables of Instruments

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Sus Accent	✓	✓	
Sus Vib Accent	✓		
Sus NV VB	✓	✓	24
Sus NV VB Full	✓	✓	
Sus NV VB Full Niente	✓	✓	
02 Short	Flute	Piccolo	24
Marcato Short Double Tongue RRx4	✓		
Staccato Double Tongue RRx9	✓	✓	
Staccatissimo Double Tongue RRx9	✓	✓	
Shorts MOD SPEED	✓		25
03 Effects	Flute	Piccolo	25
Trill HT	✓	✓	
Trill WT	✓	✓	
Flutter Tongue	✓	✓	
Sing RR	✓		
Effects (FX) Long	✓		
Effects (FX) Short	✓		
Effects (FX)		✓	
05 Legato	Flute	Piccolo	26
Legato Slur Auto-Tempo	✓	✓	
Legato Slur Velocity-Speed	✓	✓	
Legato Slur Accent	✓	✓	

INSTRUMENT OVERVIEW: CLARINETS			Page
01 Long	Clarinet	Bass Clar	23
Sus Non-Vibrato	✓	✓	24
Sus Expressive	✓	✓	
Sus Accent	✓	✓	
02 Short	Clarinet	Bass Clar	24
Marcato Short Double Tongue RRx4	✓	✓	
Staccato RRx5		✓	
Staccato Double Tongue RRx9	✓		
Staccatissimo Double Tongue RRx5		✓	
Staccatissimo Double Tongue RRx9	✓		
Shorts MOD SPEED	✓	✓	25
03 Effects	Clarinet	Bass Clar	25
Trill HT	✓	✓	
Trill WT	✓	✓	
Effects (FX) Long	✓	✓	
Effects (FX) Short	✓		
05 Legato	Clarinet	Bass Clar	26
Legato Slur Auto-Tempo	✓	✓	
Legato Slur Velocity-Speed	✓	✓	
Legato Slur Accent	✓	✓	

INSTRUMENT OVERVIEW: DOUBLE REEDS					Page
01 Long	Oboe	Eng Hrn	Bassoon	Cbassoon	23
Sus Vibrato	✓	✓	✓	✓	24
Sus Non-Vibrato	✓	✓	✓	✓	24
Sus Expressive	✓	✓	✓	✓	
Sus NV VB	✓	✓	✓	✓	24
Sus NV VB Full	✓	✓	✓	✓	
Sus NV VB Full Niente	✓	✓	✓	✓	
Sus Accent	✓	✓	✓	✓	
02 Short	Oboe	Eng Hrn	Bassoon	Cbassoon	24
Marcato Short Double Tongue RRx4	✓	✓	✓	✓	
Staccato Double Tongue RRx5				✓	
Staccato Double Tongue RRx9	✓	✓	✓		
Staccatissimo Double Tongue RRx5				✓	
Staccatissimo Double Tongue RRx9	✓	✓	✓		
Shorts MOD SPEED	✓	✓	✓	✓	25
03 Effects	Oboe	Eng Hrn	Bassoon	Cbassoon	25
Trill HT	✓	✓	✓		
Trill WT	✓	✓	✓		
05 Legato	Oboe	Eng Hrn	Bassoon	Cbassoon	26
Legato Slur Auto-Tempo	✓	✓	✓	✓	
Legato Slur Velocity-Speed	✓	✓	✓	✓	
Legato Slur Accent	✓	✓	✓	✓	

Instrument Types

The following paragraphs explain many of the various types of instruments (.ewi files) available in Hollywood Orchestral Woodwinds. The principles described here apply across all instruments where the described articulation is available.

01 Long

The instrument types in this folder include various types of sustained articulations. They continue to play audibly as long as the note is held. They are a good choice for slow-moving lines that need a consistent sound no matter how long the notes are held.

The dynamics of the Sustain patches are controlled with the Mod Wheel. The further you push it up, the louder the sound. By using the Mod Wheel instead of Velocity to control loudness, you can create a realistic crescendo and/or decrescendo during a held note.

When you play any note in one of the patches, all 3 dynamic layers start to play simultaneously, but only one or two of them are audible at any one time, as controlled by the

Mod Wheel. This approach increases the voice count in PLAY and makes more demands on the computer processor, but produces much more realistic dynamics.

There are several variants for the Sustain patches, described below:

Vibrato, Non-Vibrato, "NV VB"

You have a choice between using vibrato (a subtle wavering of the pitch that provides extra warmth) or not. If you intend to use one or the other approach consistently, then the Vibrato or Non-Vibrato patch provides the right sound. If you need the ability to control the amount of vibrato in a line (even changing mid-note), the various "NV VB" patches lets you use the Mod Wheel to control how much vibrato is heard. Note that the "NV VB" patches with "Full" in the name work a little differently from those that do not have "Full" in the name.

Without "Full": When the Mod Wheel is in about the bottom half of its range, the sound moves from *pp* up to *mf* and always with no vibrato. Then at about the midpoint of the range, while the volume continues to increase toward *f*, the sound uses more and more vibrato. That is, vibrato is heard only in the louder half of the dynamic range.

With "Full": In these patches, the vibrato and loudness are controlled independently. Vibrato is still controlled with the Mod Wheel (CC 1), but the loudness is controlled with the MIDI "Expression" controller (CC 11). Pushing the Mod Wheel to a higher values gives you more vibrato. Pushing the CC 11 controller to a higher value gives you a higher volume.

Niente

Some of the "Full" patches include "Ni" in the name, which is short for the Italian phrase "al niente," meaning "to nothing," indicating that the loudness can be reduced to very, very soft.

Sus Expressive

This patch adds an expressive feel to the notes with a slower attack and a gently increasing vibrato.

Sus Accent

In this patch, each note starts with a separately controlled attack, giving each note the sound of being accented. Like other Sus patches, The Mod Wheel controls the loudness of the sustain, but here the Velocity of the MIDI note controls the strength of the attack.

02 Short

Articulations included in the 02 Short folder include varieties of:

- Staccato
- Staccatissimo
- Marcato

Important Note on Reverberation and Short Articulations

Be aware that, in general, short articulations do not include release trails. But there is some reverberation at the end of the main sample once the instrument stops playing. This approach allows you to play fast passages without building up a lot of overlapping reverberations. Therefore, when playing a phrase of staccato notes, be sure to hold the MIDI notes long enough to hear the natural reverberation of the recording studio in the short rests between the sounding notes (if your tempo allows it).

Even when there are no rests between short notes, be sure to hold the last note of the phrase long enough to let the reverberation of that last note ring.

Staccato and Staccatissimo

The term "staccato" refers to notes of short duration that are not connected legato to the following note. Staccatissimo is like Staccato, but with notes of even shorter duration. In the names of the articulation files, Staccatissimo is abbreviated "StacSs."

Double Tongue

Some short articulation files indicate that they use the technique known as double tonguing. This lets the instrumentalist achieve a faster sequence of notes by stopping the airflow alternately with the tip of the tongue and with the back of the tongue against the palate. The tongue moves in the same pattern as when saying "tiki tiki tiki."

Marcato

When used in a score, the term "marcato" indicates that every note is to be accented. This articulation contains notes of a short duration that begin with a strong accent.

These are Round Robin instruments with 4 sets of samples in rotation.

Shorts MOD SPEED

Each one of these instruments allows you to use the Mod Wheel to move continuously among several short articulations. As you push the Mod Wheel up from the bottom, the articulations you hear proceed from the shortest (staccatissimo) to longer to marcato. Near the top of the Mod Wheel's range, the generated notes play a short attack and a sustained note. Use this patch when you need a variety of note lengths, most of which are short.

Each of the four included articulations sits in about a quarter of the Mod Wheel's 128-value range. As you move from 0 to 127, you pass through:

- Staccatissimo
- Staccato
- Marcato Short
- Marcato Short played simultaneously with a Sustain

03 Effects

The instruments in this folder fall into several types:

- trills
- flutter tongue
- special effects (FX)

Trills

A trill is the rapid alternation between two notes either a half tone or a whole tone apart. Any file with "HT" in the name contains a half-tone trill. And with "WT" in the name, it contains a whole-tone trill.

This instrument responds to the Mod Wheel to control the volume. It does not respond to MIDI Velocity. When you play a MIDI note, the samples for all three dynamic layers start playing, with the Mod Wheel controlling whether, and how much of, each layer is audible. This approach allows you to increase or decrease the loudness during the trill.

Flutter Tongue

When a flautist flutters his tongue while playing, similar to the rolled R in some languages, it produces a characteristic sound captured in the several Flutter Tongue files in this library.

The Mod Wheel affects the loudness, allowing a continuous crescendo or decrescendo mid-note. Velocity does not control loudness for these instruments.

Effects (FX)

A few 03 Effects folders contain patches that feature recordings of the instrument playing sounds beyond the usual diatonic notes, including squawks, breathy sounds, glissandi, and the like. It's best just to listen to the range of sounds and see whether you can use any of them. In some cases, these effects are divided into separate files for sounds or phrases of long and short duration.

04 Keyswitches

The Silver Edition of Hollywood Orchestral Woodwinds does not include any keyswitch files. When you upgrade to the Gold or Diamond Edition, these folders will be created.

05 Legato

Legato Slur

The basic slur legato patch creates a slur between notes as long as there is no delay between the end of the first note and the start of the following note. Plus, the interval between the two notes has to be no more than an octave. Moving from D3 to D4 generates a legato slur; moving from D3 to D#4 does not.

Because these patches always start playing 3 sustain samples (in addition to cross-fade between them based on the Mod Wheel) and also use separate samples to provide the slurs, be aware that the patches use more computer resources than most of the simpler instruments.

Some Legato Slur articulations include the text "Auto-Tempo" or "Velocity-Speed" in the name. These names refer to the two different ways mono-legato scripts can work. Auto-Tempo adjusts interval start times and envelopes based on how fast notes are played. In contrast, Velocity-Speed adjusts these parameters based on the MIDI Velocity parameter of the notes. Depending on which one you use, either the higher the note's velocity or the faster the speed of the passage, the further the interval start times get pushed in and, therefore, the shorter the envelope attack setting becomes.

Monophonic Behavior in Legato Instruments

By default, all legato instruments in this library are monophonic. By allowing only one note to play at a time, PLAY makes sure that there is no ambiguity about what two notes should have a legato transition between them.

It is possible to turn off the monophonic behavior with MIDI Control Code 22. When in the top half of its range, 64–127, the controller preserves the default behavior. But whenever CC 22 is in the range 0–63, polyphonic behavior is turned on. If you turn on polyphonic behavior, you do need to listen to the output carefully to see whether there are unwanted legato slurs between notes in different polyphonic voices. If so, one remedy is to move those two voices to separate MIDI tracks.

5. Orchestral Technique in Hollywood Orchestral Woodwinds

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Orchestral Technique in Hollywood Orchestral Woodwinds

This chapter discusses ways to use Hollywood Orchestral Woodwinds to achieve the traditional sound of the woodwind family within a studio orchestra. The first section is advice from the producers about setting up templates.

Setting Up Templates

An ideal way to work with any large orchestral ensemble is to set up templates once you have gotten to know the sounds and how all the features of PLAY work. You might, for instance, have a comedy template that has a lot of staccato articulations, effects, and/or an epic template that has a lot of legato patches. Obviously, the more computers you have and/or the more capable the computers, the bigger your templates can be.

Once you have decided on what patches will go inside your template and have made sure they will all fit into your available RAM, you should load everything and save the setup for each instance of PLAY to its own .ewi file or, if you have multiple instances of PLAY loaded inside a sequencing program or VST host, it is as simple as saving the sequence or VST host file. This will remember everything inside. If you are using multiple computers, make sure you have created a track in your sequence for every program on every computer.

One last thing to consider when deciding which computer will load which sounds is the amount of work each computer will have to do. Make sure to spread the sounds that you use most onto different computers so one computer doesn't end up carrying a majority of the load.

Remember that if you're running Hollywood Orchestral Woodwinds on more than one computer concurrently, you will need an iLok security key and a license for each computer.

The next stage is crucial and highly subjective. The Hollywood libraries respond to three different volume controllers: CC7 (volume), CC11 (expression), and the Mod Wheel (CC1). It is highly recommended you record a CC7 message at the beginning of every track. Spend some time to set the initial volume of every track at a level in natural balance with the rest of the orchestra. This is tricky and will never be perfect, but the more time you spend the less hair you'll lose later. If you will be using Hollywood Orchestral Woodwinds exclusively, the balance of section is easier than if you're bringing in instruments from other sections. If, for example, you're using the Hollywood Strings and Brass, plus the percussion of EWQLSO, then start by playing the timpani, horns, and big string

ensemble really loud and at the same time; that will give you a reference of what the loudest passages will be like. Together, they should be at least 3 db below 0. Then adjust the other instruments to blend with these loudest instruments.

It's recommended you not use MIDI volume (CC7) for any other purpose than this initial volume setting. Use CC11 and the Mod Wheel to change volume and breathe life into your compositions. This way, CC7 acts as a limiter and keeps everything from getting out of whack. Also, you can easily change the prominence of an entire track in the mix by adjusting this single CC7 level at the start of the track.

At this point, you should save the sequence before moving on. Then go to your matrix editor (or whatever it's called in your sequencer) to set up windows that display CC7, CC11, and CC1 (Mod Wheel) information. You will be editing these last two a lot, so it's a good idea to make these windows easy to access. Save your templates and you're ready to go.

Opening Multiple Instances of PLAY Within a Host

It's possible to open more than one instrument in any PLAY window—and that's true whether PLAY is running standalone or as a plug-in within a host. When running PLAY as a standalone program, it's only possible to open a single instance on the desktop (for PLAY versions 4.0 and higher), but for PLAY running as a plug-in, it is possible to open more than one instance at a time. So this raises the question of how many instances to open within your sequencer or other host. There are often compelling reasons for spreading instruments across multiple instances. (An "instance" is each open window running PLAY. So, if, for example, you see exactly 3 PLAY windows inside your sequencer, then you have opened 3 instances.)

The main reason for opening a PLAY plug-in more than once is to be able to take full advantage of the multiple cores available in today's high-end computers. If, for example, your computer's CPU has 4 cores, then each of the 4 cores can be independently running separate parts of the software, each part called a "thread."

Sequencers typically assign all the processing in any given instance of a plug-in to a single core. So, in one case, if you load all your instruments into a single instance of PLAY, the work of running all those instruments will be restricted to a single core, which is less efficient than spreading the work across all the cores. But, in another case, if you create at least as many instances of PLAY as there are cores in the CPU, the sequencer can assign the instances across all the cores, which most likely means you can open more instruments and play them back with less chance of a problem.

As a general rule, if you're using more PLAY instruments than you have cores in your computer, then it's best to open at least as many instances as you have cores. Let's say you have a 4-core computer and are planning to open 10 PLAY instruments. You could open 4 instances of PLAY and spread out the patches 3, 3, 2, and 2 per instance. Or you could open 10 instances with one instrument each. Or some arrangement in between. The exact arrangement that's best for you depends on which instruments, how consistently each is heard through the piece, the complexity of the instruments (cross-fades

are often using more CPU resources at once than other patches), and other factors. If you come up with an arrangement in which each instance is using about the same number of voices as the other instances, then you're likely using your instances efficiently.

Prepping the MIDI Controllers

It is recommended that you tell PLAY what MIDI Control Codes to look for by sending some Control Code messages after loading the patches and before the first notes are played. When playing live, that can mean tweaking each of the knobs, sliders, and wheels enough to send some data to PLAY. In a sequencer, you can draw a short sloped envelope for each controller before the first notes. This advice applies to the Mod Wheel (CC1), CC7, CC11, CC22, and any other Control Codes in your project.

Creating a Soundscape

Whether listening to an orchestra live on a stage or from a stereo recording, we're all used to hearing the sounds of the various instruments coming at us from different directions. In a traditional symphonic layout for an entire orchestra, for example, we expect the violins to be on our left, and the cellos and basses on our right. There are two reasons we might want to continue this practice. The first is to trick the listener's ear into perceiving a recording of a live performance. Even when everyone understands that the piece was created inside a computer, emulating a traditional sound can have its benefits. The second reason is that it's easier for the human ear to hear two similar sounds as separate when it perceives them as arriving from different locations. If the trumpets and the horns are doubled, or even playing an octave apart, they will stand out from each other better when they seem to be in separate locations in the soundscape that surrounds us.

Panning

As was done with EastWest's ground-breaking Symphonic Orchestra, Hollywood Orchestral Woodwinds is different from most other collections of orchestral samples in that the panning of the various instruments to the traditional locations on the sound stage is built in to the stereo samples. The flutes, for example, are already slightly louder in the left channel. Therefore, one can leave the panning level at "center" for all instruments and they will be correctly placed on the stage in the final mix. Of course, if you want to adjust the panning to achieve your own sound and/or a non-traditional placement of instruments, that can be accomplished either in the PLAY interface or in the host sequencer.

The "spread" of the sections in Hollywood Orchestral Woodwinds is smaller than in Symphonic Orchestra. If you want a wider feel, you can pan the instruments a little to achieve that effect.

Note that the natural panning within the whole EastWest Hollywood series has one subtle feature that reverb plug-ins do not offer: correctly timed reflections from all surfaces. To understand this concept, consider a bassoon player who is 5 meters from the wall to our right and 45 meters from the wall to our left (for a total width of 50 meters for the stage). We are seated half way between the walls. The reflection from the right wall, which will be louder in our right ear, travels 30 meters (5 plus 25); the reflection from the left wall,

louder in our left ear, travels 70 meters (45 plus 25). That 40-meter difference means that the reflection arrives in our right ear approximately one-ninth of a second sooner than in our left ear, a significant difference. And the other instruments all have their characteristic left/right delay based on where they sit on the stage. It is impossible for a single digital reverb to achieve that level of realism.

Proximity Clues

Panning left or right is not the only way to separate instruments. It is also possible to move them forward and backward. This can be achieved in three ways:

1. Dynamics relative to timbre
2. Delay
3. Presence (Diamond Edition only)

1. When most musical instruments change from being played louder to softer the timbre of the sound changes. Even if you let someone else adjust the volume control on your stereo, you can still tell whether the oboe you're hearing was played loud or soft based on the instrument's tone; most instruments have a harsher sound when played louder. So, in an orchestral mix, if the oboe seems to be played loud, but the volume level of that instrument compared to others is softer, then the ear assumes the oboe is farther away. Adjusting independently the timbre—with velocity parameters and/or a cross fade using the Mod Wheel or CC 11—and the volume of the sound, you can move individual instruments forward or backward.

2. Because sound travels at a fixed speed of approximately 340 meters per second (1100 feet per second), the ear uses very small time delays to judge relative distance. If two oboes play staccatissimo notes simultaneously, and one is 15 meters (50 feet) further away, the note from the more distant trumpet arrives 0.044 seconds later. That's about one twenty-third of a second, a short time but noticeable to the ear. It's very easy in a sequencer to delay a track by a specific time—either with a Delay plug-in or by shifting the notes in the sequencer's Piano Roll view—and thereby achieve this effect.

3. (This technique is only available in the Diamond Edition.) As discussed in the section covering the 5 mic positions, the farther you are from an instrument in a concert hall the more the natural reverberation of the hall contributes to what you notice. (You still hear the echoes from the walls when you're close by; you only notice them less because of how loud the instrument is. It's harder to hear the crinkle of a cough drop wrapper standing near a roaring jet engine than in a hushed concert hall, even though the wrapper makes the same sound.) This "presence" of the sound is another distance clue. Mixing in more of the Close samples for an instrument makes it seem closer to the listener.

By combining all three principles, you can achieve quite convincing front/back positioning in your orchestra mix. Giving the ear contradictory signals can confuse it, achieving either a good or bad effect, depending on your intentions.

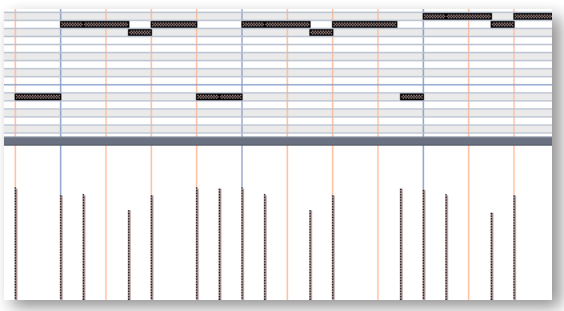
And then, of course, there's multi-channel surround sound, but that discussion is out of scope in this section.

Volume, Velocity, and Expression

There are at least three ways to make a sampled instrument sound louder, or at least make the real instrument seem to have been played louder. The skilled MIDI orchestrator uses all three.

Volume is just the loudness of the generated sound. Changing volume is basically the same as turning the volume knob on your audio system. The bassoon played softly can be cranked up; a loud clarinet passage can be turned way down.

Volume can be adjusted mid-note; that is, the listener can experience a crescendo or diminuendo for a held note. Even un-natural sounds can be created, such as a crescendo for a single staccatissimo note.



And, as with a live orchestra, the various instruments are changing their loudness independently, something you cannot do with the stereo's loudness knob.

Velocity, a term based on how strongly a keyboard player hits the keys, controls how forcefully the note is played. Adding force changes not only the loudness of the notes, but usually also changes the notes' timbre. With a piano's action, the velocity cannot affect what happens to the sound after the hammers hit and leave the strings, and velocity works the same way here. In the current implementation of MIDI, velocity is usually designated by a number between 0 and 127. Many software sequencers display velocity as vertical bars, something like those at the bottom of the image above.

Most modern sample players, PLAY included, can play different samples for different ranges of velocity. For example, the team creating the samples might record Middle C with the clarinet for ***pp***, ***p***, ***mp***, ***mf***, etc. The team then assigns the ***pp*** samples to, say, velocities 0–25, the ***p*** samples to velocities 26–45, and so on. Because each dynamic level of a trumpet has its own timbre, a note's velocity can affect not only its loudness but also its timbre.

Velocity changes are, therefore, a much better way than volume changes to achieve natural-sounding dynamics. The disadvantage of velocity is that it cannot be changed mid-note. Using loudness and velocity together gives the orchestrator more control over all aspects of dynamics.

The Mod Wheel (CC1) replaces Velocity for many instruments in the Hollywood Orchestral Woodwinds library; that is, those articulation files do not respond to the Velocity parameter of a MIDI note at all.

This is true mostly for articulation files that can be held for a long time, such as sustains and trills. When playing a real instrument, the instrumentalist often chooses to change the dynamics mid-note, which may also result in a change in timbre mid-note. None of

the controls described in this section can change both loudness and timbre mid-note except for the Mod Wheel.

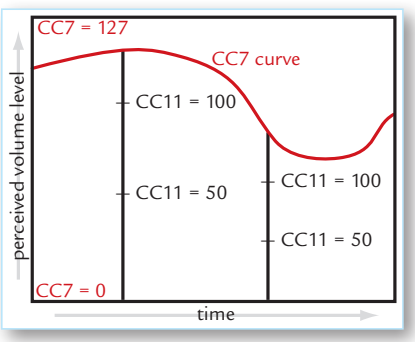
Once you learn to use the Mod Wheel—whether playing live or in a sequencer—you will find it to be an excellent means of controlling the continuous dynamics of the notes.

Expression is represented by another MIDI control code: CC11. The usual way to use CC11 is for continuous control of the loudness. That is, while Velocity cannot change mid-note, and it is recommended that CC7 be set only once at the beginning of the piece—or at least only at the start of major sections—CC11 can provide the kind of dynamic shaping of notes that give music its expressive life (hence the name "Expression" for this Control Code). Use it to create swells in the middle of a note or of a phrase. With CC11, you create the crescendos and fluid dynamics of expressive music.

In this woodwind library, CC11 is sometimes used to control cross-fades. In these cross-fades, CC11 provides the same continuous control of loudness that was described above, and it also controls timbre. In such a cross-fade, Velocity is usually turned off; that is, the selection of which dynamic layer should provide the samples is taken away from Velocity.

In a CC11 cross-fade, all the dynamic layers (for example, ***pp***, ***mp***, and ***ff***) play at once and CC11 controls how much of each to mix in. In this approach both the loudness and the timbre change continuously and together, giving a much more realistic sound. You will generally find CC11 cross-fades on those instruments that can benefit from mid-note changes in dynamics because they are often held for long times.

It is possible to shape the dynamics of a line either by "playing" a CC11 controller in real time, or by drawing an envelope in a sequencer. Most MIDI keyboards and control surfaces have programmable knobs and/or sliders that can be set to send CC11 messages to a specific MIDI channel. (Sliders are generally more sensitive for real-time control.) If your sequencer supports automation, it can record the movements of the knob or slider and save them as part of the project. Such manual and real-time control over the shape of an instrumental line is usually more efficient than drawing in an envelope, and often achieves more convincing results.



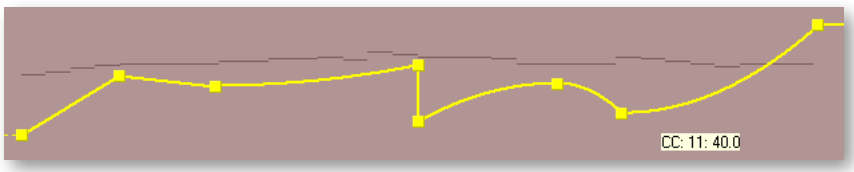
EastWest's choice to use CC11 (and the Mod Wheel) allows CC7 (volume) to be used in other ways. The usual convention is to use the volume slider in your sequencer to adjust the overall volume level of each track in the mix once at the beginning.

Although the volume and expression controls can be adjusted separately, the volume setting does change how expression affects perceived volume. Think of CC7 as setting an upper limit on the dynamics at any moment. Expression, like most continuously changeable values in MIDI, takes values between 0 and 127. CC7 specifies how loud a sound to generate for the maximum expression, 127. The diagram seen here shows that when volume decreases the fixed changes in expres-

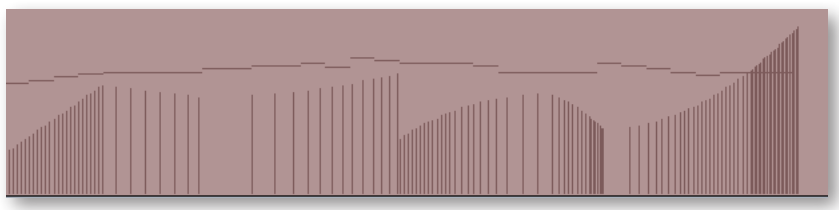
sion represent smaller changes in perceived loudness. Changing from an expression level of 50 up to 100 represents a smaller change in loudness when the volume control (CC7) is reduced.

MIDI Envelopes and Control Data

Most modern sequencers let you draw an envelope for MIDI control codes. The diagram below with the yellow curve is an example of an envelope for CC11. Notice how the values are constantly changing, the same way a bass clarinet player adds musicality and interest to a phrase by changing the pressure of her breath moment to moment. (The dark horizontal lines near the top are the notes.)



When saved as MIDI data, this same envelope appears as a finite set of commands, as in the next image. In a sequencer track, these often appear as vertical lines, each line being a command to change the value—in this case to change CC11.



The other way—and many say it's the better way—to send CC11 events to the sample player is with a MIDI controller, either a keyboard or a control surface. As long as you or your group has an extra hand—or foot, if you use a pedal—you can enter these control codes while playing the notes into the sequencer. This allows you to hear the interchange among the notes, their velocities (how hard you're hitting the keys), and the expression being added with CC11.

This process can also be done in two passes—notes first, then control data—if your setup allows you to record automation data to a track that already contains other MIDI data.

Everything written about CC11 in this section also applies to CC1 (Mod Wheel) and all other MIDI control codes. Learning to shape musical lines the same way an instrumentalist does will give your work a more natural musicality. By combining velocity control, expression, Mod Wheel, and volume, you change digital samples into real, living music.

Using Cross-Fades

The Hollywood libraries make extensive use of cross-fading, more than any EastWest library that was created before this series.

The basic idea of a cross-fade is that 2 or more samples of the same instrument—but that differ in some aspect, such as loudness, timbre, and/or vibrato—are played back

simultaneously. And the mix of how much of each sample makes it into the audio output is controlled by some MIDI control code. Traditionally, that has been Control Code 1 (the Mod Wheel). The Hollywood libraries use these Mod Wheel cross-fades even more often and sometimes with a second option: Control Code 11 (Expression).

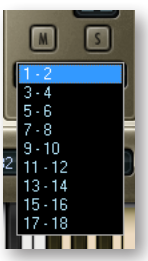
Part of the reason for using more cross-fades is that they provide a more continuous and gradual change from one sound to another. Also, they modify timbre along with loudness, even mid-note, just like an acoustic instrument. And a third reason for using more cross-fades in this library is that recent improvements in hardware and software make this much more realistic approach possible.

In Hollywood Orchestral Woodwinds, look for cross fades in articulations that can be held for a long time, such as the Sustains and the Trills.

The only real reason not to use cross-fade instruments as often as they'd be useful in your projects is that they use significantly more of your computer's resources. That's less of a concern, though, for the woodwind articulations than for those in the string and brass sections.

Directing the Audio Output

The output from PLAY is one or more stereo audio signals. The image at the right shows 9 stereo pairs of outputs in the drop-down list from the Master Output control. Each instance of PLAY has its own outputs separate from those of every other instance.



If you are using PLAY as a plug-in in a host, you can usually specify whether you want the output audio to be captured in a single track or maintained as separate tracks. The image at the left shows how one sequencer (Sonar) gives you a choice. The first checkbox creates a single track to hold all the audio output (with the assumption it will be the first stereo pair: "1-2"). The second checkbox creates 9 audio tracks, one for each of the stereo pairs in the drop-down list shown at the right. The third creates 18 mono tracks, in case you want to keep the left and right tracks separate. See the documentation for your sequencer to learn how that selection is made in the host software you use.

If you've selected to set up a single track to hold all the audio output from one instance of PLAY, and you open multiple instruments in this instance, then all the instruments will be mixed in the PLAY audio engine and written to the track as a single stereo signal.

If, instead, you've selected to set up multiple tracks, then you can select the track for each individual instrument and possibly each individual microphone position. Outputs that share the same channel are mixed in the PLAY audio engine and written out as a single track. Outputs on different channels are written independently to different sequencer tracks, and available to be mixed within the sequencer at a later time.

ADVANCED: Note that the sequencer may be able to generate a monophonic track from the stereo output, but that will happen in the sequencer; PLAY always outputs stereo. See the sequencer's documentation if you want to generate a monophonic track.

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